From: Roy C. Dixon
To: Microsoft ATR
Date: 1/15/02 9:15am
Subject: Microsoft Settlement

U.S. Department of Justice:

Pursuant to the Tunney Act, I am submitting comments on the United States v. Microsoft settlement. Please see the attached Microsoft Word document that briefly summarizes the significant costs of Microsoft's innovation to one of its customers.

In preparing this document I have tried to report only factual details about the use of one of Microsoft's programming products and not make any accusations on what development practices within Microsoft were the basis for the problems experienced by this customer.

Roy C. Dixon
Cary, North Carolina

The purpose of this document is to relate how innovation by the Microsoft Corporation has affected one of its customers. It will focus on one Microsoft product, Microsoft Office, specifically Microsoft Access 2000, and how MicrosoftÆs innovation has resulted in significant costs to this customer. The cost has been reflected not only in terms of dollars, but also in ease-of-use and performance.

The customer in this case is a church that needed a database product to maintain information about its members. In the early 1990Æs, Microsoft introduced Access 2.0 at an introductory price of $99.00, a price significantly below other database products. This purchase proved to be a wise investment since Microsoft Access 2.0 was a very well designed product that was extremely easy to use. In fact, the set of help menus offered by this product are unsurpassed by any other programming product this author has used.

A Microsoft Access 2.0 database was designed by the author of this document and deployed by the church on multiple computer systems that were interconnected through a local area network. By splitting the database into two components, an application component and a data component, multiple members of the church staff could each use a copy of the application component of the database at one time and share the single copy of the data component of the database. This is classically the way a Microsoft Access database is deployed over a local area network.

During the 1990 decade, the church also used other Microsoft Office products, Word, Excel, Internet Explorer, and Outlook Express. Although some members of the church staff would of preferred to use other competing products (the church secretary and the associate pastor preferred Corel WordPerfect over Microsoft Word), using only Microsoft products provided a level of interoperability among the products that was not always possible with using a collection of competing products. If the Microsoft Corporation had defined and negotiated with its competitors a set of common programming interfaces, the church would have had an option to employ one or more competitor products in conjunction with itÆs Microsoft Access database.

Late in the decade the church was compelled to upgrade their versions of Microsoft Word and Microsoft Excel. Microsoft had released updated versions of their office software, specifically Office 95 and Office 97, and the file data formats were incompatible with the earlier version of Microsoft Office that was being used by the church. Files received from members of the church drafted in these newer versions could not be read with the older Microsoft Office software. So the church was obligated to upgrade the Microsoft Office software, even though the old software completely suited the needs of the church staff.

At this time, Microsoft had just released Office 2000 and the decision was made to upgrade to this new release. This included updating Microsoft Access from 2.0 to 2000. This has since proven to be a mistake. Microsoft Access 2000, a complete rewrite of the older versions of Microsoft Access, is basically a very poor product. It is extremely difficult to use as a design tool and the programming interface is extremely complex. Furthermore, the help menus within Microsoft Access 2000 and the other Microsoft Office 2000 programs produce an overabundance of references for a given search (50 or more is not uncommon), many of which have absolutely nothing to do with the search topic. In this authorÆs opinion, the Microsoft Access 2000 product is basically unusable.

But a more serious problem is that to run Microsoft Access 2000 requires a computer system with a relatively high-speed processor (at least 400 MHz) and a considerable amount of memory (at least 256 Megabytes) to provide an acceptable level of performance. This meant that the church had to replace three of its four computers, an expense that the church should not of occurred. One of the computers was kept since it had been purchased in the previous year and additional memory was added to this computer. Due to extremely poor performance of Access 2000 over a local area network, the church staff is still using Microsoft Access 2.0 on this one computer. Fortunately in the past month, a church member has donated a computer to the church that will allow the church staff to replace this remaining computer system.

Given that the church can overcome the performance problems with Microsoft Access 2000 by purchasing new computer systems does not overcome the technical deficiencies within Microsoft Access 2000. Specific concerns are programming services that have worked properly within previous versions of Access, 2.0 and

97, but do not work within Microsoft Access 2000. The author has stumbled on a handful of such problems, all of which have been documented by Microsoft as being known problems. The sidebar on this page illustrates one of these problems.

Now the church has decided to use the e-mail support within Microsoft Access to send reports to its members over the Internet. Once this service is made available to the church staff, considerable savings will result due to reduced mailing costs. This employs a programming statement called SendObject. This programming statement works properly within Microsoft Access 2.0 and Access 97. When executed within Microsoft Access 2000, however, the program reports that an illegal operation has been performed and the program shuts itself down. Microsoft has documented this to be a problem within Access 2000 and has suggested a five-page code module to replace the existing code that executes the SendObject statement (this problem has been corrected in Microsoft Access 2002).

So the first question to be asked is why Microsoft failed to detect this error during testing of Access 2000 and why have they not supplied a program update to correct this problem?

Furthermore, the Microsoft Knowledge Base article referenced in footnote (NOTEREF _Ref534630788 \h 7) contains the following qualifying statements:
ôThe following code may not work properly if you have installed the Outlook E-mail Security Update.ö
ôIf you have limited programming experience, you may want to contact a Microsoft Certified Partner or the Microsoft fee-based consulting line at (800) 936-5200.ö
ôNOTE: This code has only been tested by using Microsoft Outlook as the MAPI client. It may not work with other MAPI-enabled mail applications. Microsoft does not support the use of this sample code with third-party MAPI applications.ö

And thus the second question to be asked is why Microsoft, a corporation that states its innovative practices are for their customersÆ benefit, would need to make such statements?

The option exists to invest in upgrading all the computers at the church to Microsoft Office XP (i.e., Access 2002). Thus the church would again be faced with paying Microsoft Corporation additional funds for newer versions of programming products that have little value over the older versions. Furthermore, the author will not only need to upgrade his home computer with Microsoft Office XP, but will have to purchase new versions of at least two development tools and more than likely invest in a couple of new reference books. The author believes that these development tools are critical in designing a Microsoft Access database of any magnitude.

If the decision is made by the church staff to upgrade the church computers to Microsoft Access 2002, the author will still design and develop the churchÆs database within a prior version, probably Microsoft Access 97. This version of Access has proven to be stable, usable, and provides a reasonable set of help menus. Furthermore, the author already owns the Access 97 versions of the development tools mentioned in the previous paragraph. This means that the database will require conversion to Microsoft Access 2002 every time a new update is provided to the church. Based upon the authorÆs experience with converting a database to Microsoft Access 2000 this conversion process is not completely automatic, requiring a number of manual changes and additions after the program completes the conversion process.

Thus as the church migrates from the earlier versions of Microsoft Access (2.0 and 97) to the later versions (2000 and 2002), the following observations can be made:
The performance of the database program has decreased significantly.
The usability of the design interface to the program has decreased significantly.
Some original design and programming constructs are specifically not supported.
Many new design and programming constructs have been poorly implemented and tested.
The usefulness of the help menus and technical manuals has degenerated significantly.
Services within the database program interoperate with fewer supporting programs.
Along with the monetary expenses mentioned earlier, these are the ever-recurring costs to a customer for MicrosoftÆs innovation through its Access database program product!

Mike Gunderloy within his article on Access 2002 in the June 2001 issue of Smart Access states, ôSubform and subreport design is also much improved in Access 2002 from Access 2000. For starters, the scrollbars for a subform or subreport in design view now scroll in increments small enough to be useful, making it possible to edit subforms/reports in place without making you want to throw the keyboard through the monitor.ö

As an illustration of this deficiency, open Microsoft Access 2000 Help and perform a search for the SUM function. One obtains a list of 137 references, none of which describe the SUM function. Or do a search for the COUNT function. One obtains a list of 320 references, none of which to the authorÆs knowledge describes the COUNT function.

The carton containing Microsoft Office 2000 states that the system requirements for running under Windows 95 or 98 are a PC with Pentium 75 MHz processor and 16 MB of RAM for the operating system, plus an additional 4 MB of RAM running simultaneously (8 MB for Outlook or Access). This is a considerable understatement.

Complicating the performance issue was using WinProxy, a program from Ositis Products, which allowed all the church computers to simultaneously share a single dial-up connection to the Internet. It was realized that WinProxy was causing a significant traffic load on the local area network only after the church switched to a cable modem for accessing the Internet. The author has been unable to discover the reason behind this disruptive behavior.

The author has estimated that the performance of Microsoft Access 2000 over a local area network is approximately ten percent the performance of the same database running within Microsoft Access 2.0.

Please refer to the following two articles within MicrosoftÆs Knowledge Base (the first relates to Microsoft Access 2000 and the second to Microsoft Access 97):

HYPERLINK "http://support.microsoft.com/default.aspx?scid=kb;en-us;q208364" http://support.microsoft.com/default.aspx?scid=kb;en-us;q208364

HYPERLINK "http://support.microsoft.com/default.aspx?scid=kb;en-us;q155077" http://support.microsoft.com/default.aspx?scid=kb;en-us;q155077

Please refer to the following article within MicrosoftÆs Knowledge Base:

HYPERLINK "http://support.microsoft.com/default.aspx?scid=kb;en-us;q260819" http://support.microsoft.com/default.aspx?scid=kb;en-us;q260819

Based upon private communications with Mike Gunderloy, author of the Smart Access article mentioned in the first footnote, and Peter Vogel, editor of Smart Access (http://www.smartaccessnewsletter.com).

The SendObject code module does not work on the churchÆs computers when running Microsoft Outlook Express, only when running Microsoft Outlook. More importantly, the code module does work on the churchÆs server that is running Microsoft Windows 2000, only on the other computers running Microsoft Windows 98.

The two development tools are Speed Ferret by Black Moshannon Systems (a global find and replace utility for all objects and code within the database) and Total Access Analyzer by FMS (a database analysis and documentation utility). Since the developers of these tools just released their Microsoft Access 2000 versions, support of Microsoft Access 2002 will probably not be available in the near future.

Microsoft Access 2.0 was shipped with two technical manuals thereby giving complete documentation on how to use the product. Microsoft ships the Office XP product with little documentation. This is a fundamental flaw. Preparing documentation on any product is an excellent method for checking the logic and usability of a product.

The author through his Microsoft Access database development activities has stumbled on many problems in support of these observations. Only a limited number have been documented in this paper to illustrate the problems.

A CustomerÆs Cost for MicrosoftÆs Innovation

Column Formatting Problem

The church publishes a roster of members that contains a subreport listing the e-mail addresses of the members. This subreport is printed in two-column format like a phone book (names are listed alphabetically starting in the first column and then continuing in the second column). This formatting works within Microsoft Access 2.0 but does not work in Microsoft Access 2000. Furthermore, this formatting does not work in Microsoft Access 97. Microsoft suggests the following resolution to this problem:

ôTo work around this behavior, follow these steps: (1) Open the subreport in Design view. (2) On the File menu, click Page Setup. (3) Click the Columns tab. (4) Under Column Layout, click Across, then Down.ö

This is not a work around! This is an entirely different column layout, one that is not appropriate for a telephone-book type of listing. Has this problem been corrected in Microsoft Access 2002? Probably not is the authorÆs guess.

August 23, 2000

To: Microsoft Freedom to Innovate Network
(HYPERLINK "mailto:msfin@microsoft.com" msfin@microsoft.com)
Dear Microsoft,

Please stop your style of innovating! Your customers cannot continue to absorb the significant costs to their computer systems caused by your type of innovation.

Since purchasing Microsoft Office 2000, I had to purchase a new sophisticated computer system just to run Access 2000 (Access 2.0 and Access 97 run perfectly well on my old computer system). My church, using a Microsoft Access 2.0 database that I wrote, will have to endure the cost of replacing or upgrading their existing computer systems in order to run a Microsoft Access 2000 version of the database.

Bill Gates and others at Microsoft do not seem to have the perspective to appreciate the problems they have caused. From what I have read about the ruling in the antitrust suit against you, Judge Thomas Jackson appears to understand and appreciate the problems your style of innovating has imposed upon your customers, even though he is has minimum expertise in computer science.

And compounding the issue, Microsoft Access 2000 is barely usable from a programming perspective. Microsoft Access 2.0 is one of the finest programs I have ever used (and its help screens are unmatched by any other program). Microsoft Access 2000 is one of the worst. Please stop your style of innovating!

Regards, Roy C. Dixon